

REMARKS

The Office action dated January 12, 2004 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1, 3, 7, 9, 10, 12, 13, 15 and 17 are amended, and new dependent claims 18-30 are added. No new matter is added by the amendments to the claims or the newly added claims.

Claims 1-30 are presented to the Examiner for further or initial prosecution on the merits.

Claims 1-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vos (U.S. Patent 5,363,413). Independent claims 1, 3, 9, 10, 12, 13, 15 and 17, have been amended. It is respectfully submitted that pending claims 1-17 are now in condition for allowance.

The outstanding Office action states that Vos discloses:

The decoder includes a signal strength apparatus for providing a signal strength indication of the signal corresponding to a symbol time period, an averaging apparatus for averaging a plurality of the signal strength indications to provide an average signal strength, an indexing function for generating an index value corresponding to the symbol time period, the index value depending on the signal strength indication and the average signal strength, a metric function for selecting a channel metric corresponding to the index value, and a decision circuit for weighting a decoder decision for the symbol time period in accordance with the channel metric.

Final Office action of January 12, 2004, at p. 3.

However, in the claimed invention, the path metric calculated based on the Viterbi decoding method is initialized at a moment when decoding of one of the

data streams is started, so that the path metric is not calculated based on a previously input data stream that includes an error, consequently preventing a reduction in the error correction ability of the next input data stream. Therefore, the adverse effects of a data stream having the low error correction ability on the data stream having a high error correction ability can be eliminated.

In contrast, Vos teaches preventing a reduction in the error correction ability by weighting the index value for the symbol time period when there is an increase in noise caused by the dynamic change in the quality of the transmission path. As quoted above, the Vos reference discloses selecting a channel metric corresponding to an index value, wherein the index value is calculated based on a signal strength indication and an average signal strength. The average signal strength indication is based on signal strength indications taken over a long period of time and may include all symbol time periods in a data block. The channel metric selected based on the index value, including data averaged over many data streams, is used to weight a decoder decision for the current symbol time period. Vos neither teaches nor suggests initializing a path metric at a moment when decoding of one of the data streams is started, as recited the amended independent claims.

Therefore, it is respectfully submitted that independent claims 1, 3, 9, 10, 12, 13, 15 and 17 are patentably distinct over the Vos reference and in condition for allowance. Further, claims 2, 4-8, 11, 14, 16 and 17, which depend directly or indirectly therefrom, are believed to be allowable for at least the reasons their base claims are allowable.

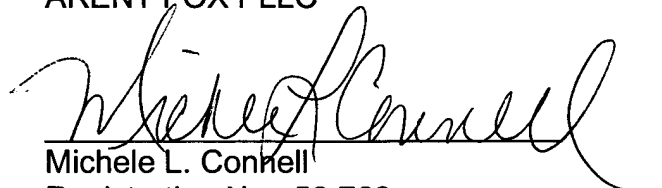
New claims 18-30 are added, each of which depends from one of claims 1, 3, 9, 12, 13, 15 and 17. Thus, each of claims 18-30 is believed to be allowable for at least the reasons its base claim is allowable.

In view of the amendments and patentable distinctions set forth above, favorable reconsideration and withdrawal of the rejections of claims 1-17 are respectfully requested, and favorable action on claims 1-30 is earnestly solicited.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fee deficiently or credit any over payment to Deposit Account No. 01-2300, making reference to Attorney Docket No. 08391-00010.

Respectfully submitted,
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